Camera AMOS Communicator

User manual
No. UM0972130 R1-3

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English

ORLACO
Specialised Camera Solutions

Camera AMOS Communicator
Manual No. UM0972130, R1-2

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Check with Orlaco which language versions are available. This manual contains user instructions. Used photographs and illustrations give general information and may differ from the products you use.
Contact your Orlaco dealer if you have questions, additional information, or want to make changes that are not described in this manual.
The camera/display systems from Orlaco comply with the latest CE, ADR, EMC and mirror-directive regulations. All products are manufactured in accordance with the ISO 9001 quality management system, ISO/TS16949 quality automotive and ISO 14001 environmental management systems.

Art. No. 0146810; Camera AMOS 118° IR LED Communicator
Art. No. 0146800; Camera AMOS 69° IR LED Communicator
Art. No. 0135860; Camera AMOS 16° Communicator
Art. No. 0135850; Camera AMOS 24° Communicator
Art. No. 0135840; Camera AMOS 58° Communicator
Art. No. 0135830; Camera AMOS 69° Communicator
Art. No. 0135810; Camera AMOS 118° Communicator
Art. No. 0135800; Camera AMOS 129° Communicator

1. Introduction

With the option button on the Serial Monitor you can adjust the zoom level of the camera AMOS communicator.
Also many settings are available in the OSD menu of the camera AMOS Communicator.

Camera AMOS Communicator

Camera AMOS Communicator IR LED

Monitor 7” RLED Serial

Version details
R1-0. First issue, October 2013
R1-1. Chapter 3.5.4 text supplemented, November 2013
R1-2. 3 Camera types added, April 2014
R1-3. Barcode added, sept. 2014

2. Zoom function of the communicator camera

In the default setting of the serial monitor, camera 1 (C1) is standard set to camera type AFZ. Do not change this. When set to this camera type and “Communicator” connected there is the possibility to use the digital zoom of the communicator.

The zoom is activated by pressing the option button (5) on the keyboard (indicated by the illuminated button), see figure 1. “Zoom” is also displayed in the screen, see figure 2. The zoom factor can be changed using the plus and minus buttons.

With the ”communicator” there are two steps of digital zoom
available, both zoom 2x.

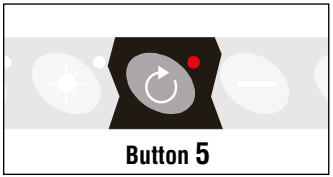


Figure 1

Figure 2

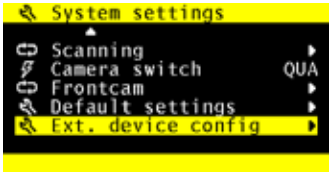


Figure 3

3. Settings of the communicator camera

See Chapter 6, page 11 for an overview of the menus and settings.
To enter the settings of the communicator camera enter the service menu of the monitor, (see also User Manual Monitor 7” RLED/LEDD No. UM0972080), Go to system settings → Ext. device config → ok. See figure 3.

Now you have entered the menu of the “serial compact camera” (Communicator Camera). In this menu there are several choices and settings, see figure 4, 4a.

To exit the “serial compact camera” menu, please hold the option button (5) until the system settings menu appears. To exit the OSD press the option button (5) twice and the camera image is shown again.

3.1. Default Settings, see figure 4.
In this menu the default settings of the camera can be restored. There is only one default active: 1.

3.2 Camera settings, see figure 5, 5a
In the camera settings menu there are 7 options.

3.2.1 Camera mode
In this menu the color setting of the camera can be changed; COL, (Color)

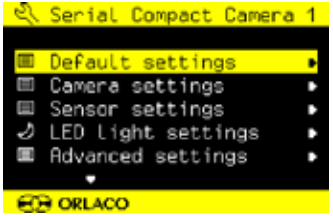


Figure 4

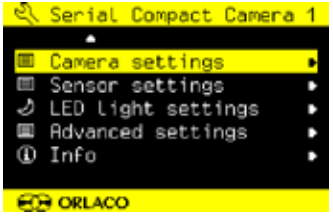


Figure 4a

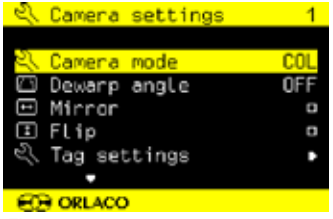


Figure 5

B/W (black and white) or ILED (for IR camera).

3.2.2.Dewarp angle

The deviation (fisheye correction) of the camera can be changed. There are different kinds of correction. Fisheye correction can be done with by correction the image with same center size (Constant Center) or correction optimized for maximum angle (Maxview). For the available communicator cameras the following deviation can be applied:

Art. No. 0135800: Lens 129°; Constant Center correction C130; Maxview correction M130.

Art. No. 0135810: Lens 118°; Constant Center correction C115; Maxview correction M115.

Art. No. 0135820: Lens 69°; Constant Center correction C74; Maxview correction M74.

Art. No. 0146800: Lens 118°; Constant Center correction C115; Maxview correction M115.

Art. No. 0146810: Lens 69°; Constant Center correction C74; Maxview correction M74.

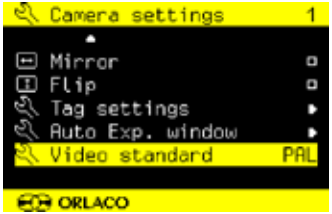


Figure 5a

Figure 6

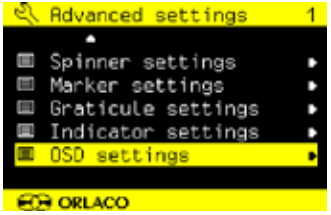


Figure 6a

3.2.3 Mirror

Change to camera to mirror mode (safety ticker remains on same position).

3.2.4 Flip

Flip the image 180°.

3.2.5 Tag settings

In this section of the menu you will find the camera tag settings.
With “label type” the appearance of the label can be switched on, the label is shown in the image. Via “tag text” the label name can be changed. Other settings are to mirror the text and adjustment of the horizontal and vertical position of the text. Also the foreground color and transparency and the background color and transparency can be adjusted.

3.2.6 Auto Exp. Window

With this option, the region of interest of the sensor can be changed, This can avoid that the gain control is disturbed by “hot spots”.

3.2.7 Video standard

Select the video standard: PAL or NTSC.

3.3 Sensor settings, see figure 4.
With this option, the generated image by the sensor can be adjusted horizontally (pan) and vertically (tilt).

3.4 LED Light settings, see figure 4.
These settings are only active when a AMOS IR LED camera is used. In this menu the IR LED can be switched: OFF, AUT (automatic) or (always) ON.

3.5 Advanced settings, See figure 6, 6a
In the advanced settings menu there are 6 options, see figure 6;

3.5.1 Startup settings

In this menu the logo can be selected and the startup version (no other options available for now).

3.5.2 Spinner settings

The safety ticker (spinner) can be switched On (standard) or Off and the position of the safety ticker can be changed.

3.5.3.Marker settings

The markers (horizontal or vertical) can be activated and the position can be changed. Also color and transparency of the markers can be adjusted. Maximum two markers can be set.

3.5.4. Graticule settings

See figure 7.

A graticule can be set in the menu. There are different types of (predetermined) graticules that can be selected. Also color and transparency of the graticule can be changed.

The graticules are designed to match with a vehicle with a width of 2.75m and corresponding mounting height of the camera (L = 2.75m; M = 3.25m; H = 3.75m). The length that is covered by the graticule is 10m. There are graticule available for lens openings: 129°, 118° and 102°. Example: GRATICULE TYPE :L118 is a 10m graticule for lens 118° and mounting height of the camera of 2750mm.

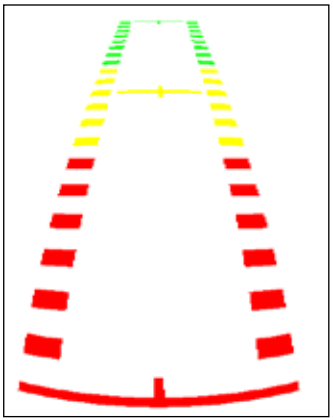


Figure 7

3.5.5. Indicator Settings

In this menu showing camera info on the screen (temperature, LED activation or both) can be activated. Other settings are to mirror the info and adjustment of the horizontal and vertical position of the info. Also the foreground color and transparency and the background color and transparency can be adjusted.

3.5.6.OSD setting

Change the position and transparency of the OSD(On screen Display).

3.6 info

Shows info about software version of the camera.

4. Use the zoom function via the monitor wires.

The grey and yellow wires at the Monitor power cable can be used to use the zoom function.

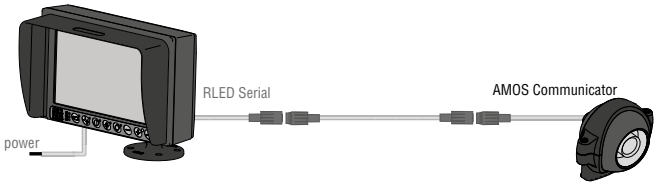
When the grey wire is activated (7-30V/DC), 1 x Zoom In is activated (max 2 x zoom).

To zoom out, the yellow wire needs to be is activated (7-30V/DC).

To zoom in 2x, the grey wire needs to be activated 2 times.

Zoom out to original image, activate yellow wire 2 times.

5. System overview



6. Overview of menus

Serial compact camera menu

- Serial compact Camera 1
  - Default settings
    - Default settings Select 1 → 1-3
    - Select defaults
    - Restore defaults
  - Camera settings
    - Camera mode → TEST, ILED, B/W, COL
    - Dewarp angle → OFF, C130, C115 C78, C74, C54, C32, C175, C133, C114, C118, C98, M130, M115, M78, M74, M54, M32, M175, M133, M114, M118, M98
    - Mirror → ON/OFF
    - Flip → ON/OFF
    - Tag settings
      - Label type → ON/OFF
      - Tag text
      - Mirrored text → ON/OFF
      - Horizontal pos. → 0-100
      - Vertical position → 0-100
      - Foreground color → White, Yellow, Magenta, Red, Cyan, Green, Blue, Black
      - F. transparency → 6, 13, 20, 26, 33, 40, 46, 53, 60, 73, 80, 86,93, 100
      - Background color → Black, Blue, Green, Cyan, Red, Magenta, Yellow, White
      - B. transparency → 6, 13, 20, 26, 33, 40, 46, 53, 60, 73, 80, 86,93, 100
    - Auto Exp. window
      - Invert AE window → ON/OFF
      - AE window x size → 1/5, 2/5, 3/5, 4/5, 5/5
      - AE window y size → 1/5, 2/5, 3/5, 4/5, 5/5
      - AE window x pos → 0/5, 1/5, 2/5, 3/5, 4/5
      - AE window y pos → 0/5, 1/5, 2/5, 3/5, 4/5
    - Video standard → PAL/NTSC
  - Sensor settings
    - Sensor hor. adjust → 0-15
    - Sensor hor. adjust → 0-11
  - LED Light settings
    - LED Light mode → AUT, ON, OFF
  - Advanced settings
    - Startup settings
      - Startup logo → OFF, 1, 2
      - Startup message → OFF, 1
    - Spinner settings
      - Display spinner → OFF, 1
      - Spinner hor. pos → 0-100
      - Spinner ver. pos → 0-100
    - Marker settings
      - Marker type → HOR, VER, OFF
      - Marker position → 0-100
      - Marker color → Black, Blue, Green, Cyan, Red, Magenta, Yellow, White
      - Marker transp. → 6, 13, 20, 26, 33, 40, 46, 53, 60, 73, 80, 86,93, 100
    - Graticule settings
      - Graticule type → OFF, L102, M102, H102, L118, M118 H118 L130 M130 H130
      - Graticule color → KEEP, White, Yellow, Magenta, Red, Cyan, Green, Blue, Black
      - Graticule transp. → 6, 13, 20, 26, 33, 40, 46, 53, 60, 73, 80, 86,93, 100
    - Graticule settings
      - Statistics type → OFF/TEMP/LED
      - Mirrored text → ON/OFF
      - Horizontal pos. → 0-100
      - Vertical position → 0-100
      - Foreground color → White, Yellow, Magenta, Red, Cyan, Green, Blue, Black
      - F. transparency → 6, 13, 20, 26, 33, 40, 46, 53, 60, 73, 80, 86,93, 100
      - Background color → Black, Blue, Green, Cyan, Red, Magenta, Yellow, White
      - B. transparency → 6, 13, 20, 26, 33, 40, 46, 53, 60, 73, 80, 86,93, 100
    - OSD settings
      - OSD horizontal pos. → 0-100
      - OSD vertical pos. → 0-100
      - OSD opacity → 6, 13, 20, 26, 33, 40, 46, 53, 60, 73, 80, 86,93, 100
  - Info

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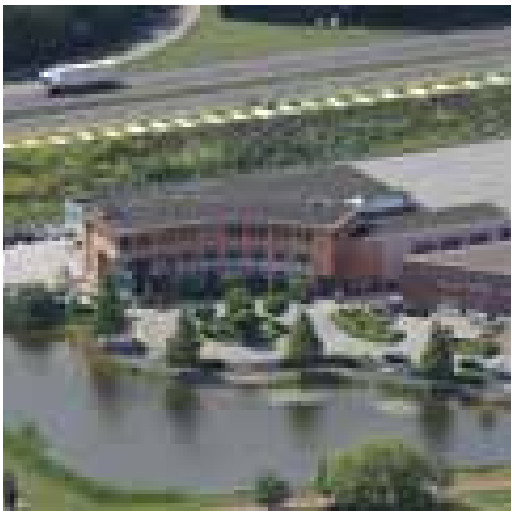

Orlaco is a Manufacturing company that specializes in making cameras and monitor systems for commercial vehicles, fork-lift trucks, cranes, off shore and maritime.
Our objective is to design and produce camera systems for the professional market that improve the drivers' view and increase operating efficiency.
At our facility in Barneveld we locate our design, manufacturing, warehousing and service department.
Vision is our mission. Orlaco therefore deploys the development, manufacture, supply and service of camera and display systems that will improve safety and efficiency of all vehicles, machinery and vessels. Our systems give the end user a view on each blind spot and will create comfort and improved working conditions. Our active approach will support market demands and innovations and will lead to enthusiastic ambassadors in the market; our customers.

For more information: www.orlaco.com

ORLACO PRODUCTS BV
Albert Plesmanstraat 42, 3772 MN Barneveld
PO Box 193, 3770 AD Barneveld
The Netherlands

Phone: +31 (0) 342 404555
Fax: +31 (0) 342 404556
E-mail: info@orlaco.com
Internet: http://www.orlaco.com

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